

## DOCUMENT RESUME

ED 142 139

HE 009 129

AUTHOR Jabker, Eugene H.; Halinski, Ronald, S.  
TITLE Instructional Development and Faculty Rewards.  
PUB DATE Apr 77  
NOTE 27p.; Paper presented at the annual meeting of the American Educational Research Association (New York, April 1977)

EDRS PRICE MF-\$0.83 HC-\$2.06 Plus Postage.  
DESCRIPTORS College Faculty; \*College Teachers; Departments; Educational Improvement; Faculty Promotion; Higher Education; Institutional Research; \*Instructional Improvement; Negative Reinforcement; \*Professional Recognition; Reinforcement; Research Projects; \*Rewards; Salaries; Teacher Improvement; \*Teacher Motivation; Tenure  
IDENTIFIERS \*Illinois State University

## ABSTRACT

A study was conducted to determine the extent to which faculty members' attempts to improve instruction at Illinois State University were rewarded. The data were obtained by three methods: (1) a questionnaire designed to obtain faculty perceptions of rewards; (2) a historical analysis of the salary, promotion, or tenure ratings received annually by the faculty; and (3) interviews with department chairpersons about the procedures for salary, promotion, or tenure decisions at the departmental level. The data indicated that the effect of faculty efforts to improve instruction on the formal reward structure was generally nonexistent, minimally positive at best, and punitive in some instances. Whether these efforts were supported by funds from an instructional development program that is one of the largest single-institution programs in the nation or undertaken without such assistance, the results were the same. By contract, the informal rewards of teacher satisfaction were valued highly by 84 percent of the questionnaire respondents. Implications of this form of institutional schizophrenia, where instructional improvement is encouraged but not rewarded, are discussed. Possible institutional changes in the reward system and negative effects of not changing it are also considered. Some statistical tables are included. (Author/MSE)

\*\*\*\*\*  
\* Documents acquired by ERIC include many informal unpublished \*  
\* materials not available from other sources. ERIC makes every effort \*  
\* to obtain the best copy available. Nevertheless, items of marginal \*  
\* reproducibility are often encountered and this affects the quality \*  
\* of the microfiche and hardcopy reproductions ERIC makes available \*  
\* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
\* responsible for the quality of the original document. Reproductions \*  
\* supplied by EDRS are the best that can be made from the original. \*  
\*\*\*\*\*

## INSTRUCTIONAL DEVELOPMENT and FACULTY REWARDS\*

Eugene H. Jabker and Ronald S. Halinski  
Illinois State University

During the last five years, the Instructional Development Program (IDP) at Illinois State University provided direct financial support to more than 400 of the faculty to improve the instructional program of the institution at all levels--undergraduate and graduate. Since 1972, over one-million dollars of the University's budget provided by the State of Illinois were devoted to this purpose for more than 250 projects, thus making the Program one of the largest in the nation. Funds were allocated to the faculty on an approved project basis during the regular academic year between August and July, and during a summer period from the middle of May to the end of June. The academic year funds provided support for all of the University's normal expenditure categories other than faculty or staff salaries and equipment; the summer monies provided a maximum of one-month salary only for each faculty participant.

While many of the faculty at Illinois State received financial support in their efforts to improve instruction; many others attempted to improve their teaching without such assistance. The high quality of instruction at Illinois State has been one of the institution's hallmarks throughout its 119 year history and is a responsibility taken seriously by the majority of the faculty.

The direct beneficiaries of faculty attempts to improve instruction have been the students. It is not clear, however, whether or not some benefit or reward had accrued also to those faculty responsible for the changes. This is a report of a study conducted to examine this possibility. The results reported herein were obtained by three methods: (1) a questionnaire designed to obtain the faculty perceptions of rewards, (2) an historical analysis of the salary, promotion, or tenure ratings received annually by the faculty, and (3) interviews with department chairpersons about the procedures for salary, promotion, or tenure decisions at the departmental level.

From 1970 through 1976, the judgments about the formal rewards of the University, that is, salary, promotion, and tenure decisions, were made annually by the faculty under an Appointment, Promotion, and Tenure (APT) process. This process provided for a committee system at the departmental, collegiate, and University levels and stipulated conditions necessary for appointment or termination of appointment; changes in salaries, promotion, and tenure, and defined the roles, functions, and structures of the various committees. The purpose of the APT process was to provide general guidelines for "fair, equitable, and consistent decisions within a democratic system that involved the faculty in the evaluation of professional competence to obtain, retain, and reward highly qualified staff members."

\*Presented at the annual meeting of the American Educational Research Association, New York, N. Y., April, 1977.

It was assumed the instructional development activities of the faculty, whether or not they were supported by funds from the Instructional Development Program, would affect the formal reward decisions regarding salary increments, promotion, or tenure. This assumption was supported by a "groundrule" of the University-level APT committee which requested that, "All instructional development programs shall be included as part of the evidence to be evaluated under teaching performance. The weight given to such activity is to be determined by each departmental APT committee."

It was also assumed that instructional development activities could be a source of intrinsic or informal rewards independent of the formal rewards which might accrue from such activities. Intrinsically motivated activities, according to Deci (1975) are "behaviors which a person engages in to feel competent and self-determining. There are two general types of intrinsically motivated behaviors: (1) seeking out situations which provide the person with a challenge; and (2) conquering challenges." The rewards for intrinsically motivated instructional development activities, therefore, are the successful identification and solution of challenging situations. In a somewhat less esoteric vein, Trow (1969) suggested "innovations in instruction in higher education arise most often out of some felt sense of the inadequacies of existing arrangements; and very often from sheer boredom with what one has been doing. (emphasis added) We are always tinkering with our courses or with the curriculum even when they are working reasonably well." Whether or not "tinkering" requires formal support to "dispel, if only briefly, the fog of boredom that hovers over everything we do in the classroom," it is suggested that such activities undertaken by faculty produced significant, if momentary, intrinsic feelings of accomplishment.

Conceivably, instructional development activities could be undertaken initially to seek out and conquer an instructional challenge or tinker, and also be rewarded by salary, promotion, or tenure adjustments. Although this possibility may pose a serious problem for theorists of motivation who are trying to discriminate between the intrinsic and extrinsic causes of behavior, it was of little consequence to this study in which the effects of behavior as opposed to the causes were the central focus. The "theory" of this study as adumbrated in the preceding few paragraphs was limited to the expectations that the quality and quantity, if any, of the formal and informal rewards accruing from instructional development activities were important data to be collected and examined. Ideally, the results of this study also will provide suggestions about the possible causes or motives of the faculty who undertake projects to improve instruction.

## PROCEDURE

### Questionnaire

The Instructional Development and Faculty Rewards questionnaire was sent to 964 teaching faculty. In the questionnaire, instructional development was viewed as all faculty efforts to improve instruction--those receiving formal support such as that provided by the Instructional Development Program as well as those undertaken without such support. Within this context, faculty were asked to respond on a five-point

scale to the importance that IS and that SHOULD BE (SB) placed on instructional development work in arriving at salary, promotion, and tenure decisions: 1 = No Importance, 2 = Low Importance, 3 = Medium Importance, 4 = High Importance, 5 = Extremely High Importance. For each respondent, Discrepancy (DISC) scores were calculated for the salary, promotion, and tenure dimensions ( $DISC = SB - IS$ ). The DISC variable was intended to measure the extent to which a faculty member perceived the formal reward system as failing to meet personal expectations--the larger the value the greater the dissonance or dissatisfaction.

Multiple regression analysis was used to determine if the variation in dissonance could be attributed to differences in rank, college, tenure, and funding status. Three dependent variables were Salary Discrepancy (SALDISC), Promotion Discrepancy (PROMDISC) and Tenure Discrepancy (TENDISC). The independent variables were a set of dummy variables defined as follows: RANK PROF = 1 if full professor, 0 otherwise; RANK ASSOC = 1 if associate professor, 0 otherwise; RANK ASST = 1 if assistant professor, lecturer, or instructor, 0 otherwise; COL AS = 1 if in College of Arts and Sciences, 0 otherwise; COL AST = 1 if in College of Applied Science and Technology, 0 otherwise; COL BUS = 1 if College of Business, 0 otherwise; COL ED = 1 if College of Education, 0 otherwise; COL FA = 1 if College of Fine Arts, 0 otherwise; TENURE = 1 if tenured, 0 otherwise; and FUNDED = 1 if funded by IDP, 0 otherwise. Due to the collinearity of the Rank vectors and also the College vectors, Professor Rank (RANK PROF) and the College of Arts and Sciences (COL AS) were used as reference vectors, thus, specific regression weights for these vectors will not show up in the results. Simpler regression models were achieved through a stepwise procedure in which a variable was added if the increase in  $R^2$  was significant with  $p < .10$ .

Twelve potential informal rewards were identified which may have been realized as a result of instructional development work, for example, personal satisfaction, esteem of one's colleagues, and national recognition. For each, the faculty were asked two questions: (1) "How important is the particular reward to you personally?" and (2) "Do you feel you actually received the reward as a result of your instructional development work?" Responses to the first question were on a five-point scale of importance: 1 = Very Low, 2 = Low, 3 = Medium, 4 = High, and 5 = Very High. Responses to the second question were on a four-point scale: 1 = Definitely Not, 2 = Generally Not, 3 = Generally Yes, 4 = Definitely Yes. The two most positive rating categories in each scale were collapsed and tabulated for each question. The twelve rewards were ranked on the basis of the tabulation results for each question and a Spearman rank order correlation coefficient was calculated.

The last part of the questionnaire allowed the respondents to identify the type of instructional development activities in which they had been involved and to express any thoughts about the Instructional Development Program or its relationship to the reward structure.

### APT Merit Ratings

Faculty ratings of "Unusual" or "Considerable" merit were considered highly favorable by the various APT committees, thus, these two categories were combined for purposes of analysis and reporting. The data, obtained from official University records for the 616 faculty members under the APT system, were tabulated by rank and college for teaching, scholarship, and service for the 1975-76 academic year. To show the general trend in ratings for the University as a whole, summary results were presented for the three areas of faculty evaluation beginning with the 1972-73 academic year.

### Interviews with Department Chairpersons

The chairpersons of each academic department, (twenty-eight) in the University were interviewed for periods ranging from thirty minutes to more than an hour to determine: (a) the structure of the APT committees and the actual process of reviewing the data submitted, (b) what effect, if any, evidence of instructional development activities had on salary, promotion, and tenure decisions within the department, and (c) what was the perceived quality of instruction in the department. Following each interview, notes were recorded and transcribed, then summarized to provide anonymity to the individual respondents and provide a synthesis of observations.

## RESULTS

### Questionnaire

There were 390 "signed" questionnaires returned of which 360 or 37 percent of the total distributed were usable. Due to the relatively low rate of return, generalization beyond the group of respondents to the entire teaching faculty should be considered tentative.

A comparison of the respondents providing usable returns by college, rank, and funding status is presented in Table 1, p. 15. In general, there is a relatively high correspondence between the respondent and the population characteristics; however, the representation in the respondent group of professors, and lecturers, instructors, and faculty assistants departed from the representation in the population by a comparable percentage. Slightly more than one-third of the respondents were funded at least once through IDP.

Faculty perceptions of the importance that IS and that SHOULD BE placed on instructional development by the formal reward system is presented in Table 2, p. 16. The majority, approximately 85 percent, of the faculty felt that no more than medium importance IS given to instructional development in arriving at salary, promotion, and tenure decisions. On the other hand, a similar percentage indicated that at least medium importance SHOULD BE attached to such efforts. Also, on both the IS and SHOULD BE dimensions, the mean importance ratings for the promotion and tenure related decisions were significantly lower than the salary mean rating (T-test for dependent measures;  $p < .001$ ).



The regression weights, multiple R's, and F-values for the analysis of discrepancy scores are reported in Table 3, p. 17. For each of the three dependent variables--salary, promotion, and tenure discrepancies (SALDISC, PROMDISC, and TENDISC)--the multiple R's for the full model were statistically significant ( $p < .01$ ), which indicated the variation in discrepancy scores was related to the rank, college, tenure and IDP variables. In particular, associate professors and assistant professors had significantly higher mean discrepancies than professors on each of the three dependent variables. The College of Fine Arts (COL FA) was the only college to differ significantly from the College of Arts and Sciences and, then, only on two of the dependent variables--SALDISC and PROMDISC. Faculty who were funded through IDP had higher mean discrepancies than faculty not funded on all three dependent variables.

The stepwise procedure yielded reduced models for SALDISC and PROMDISC which contained the same four independent variables: RANK ASSOC, RANK ASST, COL FA and IDP. For TENDISC, the outcome was essentially the same except that the variable COL FA did not strictly meet the criterion for entry; however, when viewing the total stepwise sequence for each of the three dependent variables, it appeared more compelling to include the COL FA variable in the latter model than to exclude it.

With respect to the twelve types of potential rewards outside the formal structure, the rank order correlation between the personal importance and actual realization of these rewards was .84. "Personal satisfaction from a job well done" and "Increased effectiveness as a teacher" headed the list in both instances. More detailed results are reported in Table 4, p. 18.

#### Open-Ended Question Summary

Three hundred and six or 85 percent of the usable questionnaires returned contained responses to one or both of the two questions designed to elicit more information than the fixed items allowed. These questions were: (1) Would you briefly identify the instructional improvement activities in which you have been involved? and (2) If there are any thoughts you wish to share regarding the Instructional Development Program and/or its relationship to the reward structure, both formal and informal, please indicate them below.

The first question was intended to obtain information about instructional development activities of the faculty which had occurred but were not funded by the University as Instructional Development Projects. In effect, this question explicitly recognized the probability that some and perhaps most of the faculty had attempted to improve instruction even though they had not requested nor received financial support for their efforts. The second question was designed to provide an opportunity for reactions to the IDP program or discuss the perceived relationship between instructional development and the University's reward structure. Only the responses to the last half of the second question are presented in this report.

The perceived relationship between the Instructional Development Program and the formal reward structure elicited a variety of comments. Many of the respondents were unclear whether or not there was any contingency between IDP activities and salary, promotion, or tenure rewards in the departments, and were less certain about the relationships at the college and University levels.

--"The formal rewards which I have received as a result of my instructional development work are unclear to me. On one occasion, there is clear evidence that my instructional development activities strongly influenced a decision regarding a salary increase. I do not believe, however, that the receipt of IDP grants has had any significant effect on the rating of my teaching. I am not aware that instructional development work has been regarded as being of great importance in questions of promotion and tenure in the department."

--"I do not have a grasp of how the reward structure works--it changes from year to year and month to month. I think there is a need for a clear indication of the type of reward provided for instructional development work--it would help a person decide whether he or she wanted to do such work."

By contrast, some either expressed strong but conflicting convictions that the IDP grants were considered seriously and positively in the APT process or that there had been no effect--only research and publication counted.

--"Having been a member of a departmental APT committee for two years, I do know that these efforts were rewarded by recommendations for salary increases, promotion, and tenure."

--"My academic department and college give little if any attention to IDP and certainly the reward system is not there. I regret this situation."

--"No matter what the official statements say, the true rewards in the department are based on research grants and the number of publications."

Other comments reflected ambivalence about the preferred relationship between instructional development and rewards. Some support was expressed for a much stronger positive relationship between the IDP grant projects and the APT process at all levels of the University, although there was some skepticism that the level of available funds and the perceived tendency to grant across-the-board raises effectively negated any potential. It was noted that in an institution which stresses the importance of teaching, the improvement of instruction should be rewarded on a par with research and publication. By contrast, a sizeable number of comments reflected the position that the improvement of instruction is a professional obligation of all faculty which the IDP grants facilitated; therefore, no additional formal rewards through the APT process should be made contingent on the grants received, nor should IDP activities be weighted more heavily than any other evidence. The extra resources made available or the

For APT purposes, the opinion was expressed that there should be a differentiation between funded and nonfunded instructional development activities. In the present system, some respondents believed that recipients of IDP grants had an unfair advantage over nonrecipients and that nonfunded instructional development activities also deserved recognition. The opinion was also expressed that greater weight should be given to grants received from agencies external to the University than for those projects which were funded internally.

This diversity of opinion suggests the level of conviction about the perceived relationship between instructional development and the reward structure was related both to the evidence available to the respondent and the idiosyncratic actions of the various departments. A handful of comments reflected this possibility and appealed for greater clarity and more explicit information about the nature of the relationship to lessen the ambiguity and help in the decision to participate or not in the program.

#### APT Merit Ratings

As had been stated before, "Considerable" or "Unusual" merit ratings were deemed very acceptable by the various APT committees. The results reported in Table 5, p. 19, showed that since the 1972-73 academic year, there had been a steady increase in the percentage of faculty who received these ratings in each of the reward categories--teaching, scholarship, and service. For the 1975-76 academic year, 90.8 percent of the faculty received considerable or unusual merit ratings in teaching, 66.8 percent received such ratings in scholarship, and 20.4 percent received one of these top two ratings for service. In other words, virtually all faculty were rated in one of the two highest merit categories for teaching, but only two out of three were rated comparably for scholarship.

When the merit ratings for teaching, scholarship, and service were analyzed by college and rank (see Table 6, p. 20), the pattern among the colleges was for a high percentage of faculty to receive considerable or unusual merit ratings for teaching and a relatively lower percentage of faculty to receive such ratings for scholarship regardless of rank. The exceptions to this were associate professors in the College of Business and professors and associate professors in the College of Fine Arts who fared almost as well in scholarship as they did in teaching. The most striking result was the magnitude of the difference in the merit ratings received for teaching and scholarship by assistant professors regardless of college.

#### Department Chairperson Interviews

Only four of the twenty-eight chairpersons interviewed said that IDP activities were weighted heavily in the merit decisions for salary. The other chairpersons indicated that IDP project activities were either not given any importance beyond other evidence of attempts to improve instruction or had only very limited impact.

In two of the four departments in which IDP was considered as very important, the chairpersons actively encouraged the faculty to seek IDP grants. Approximately one-third of the faculty were said to be committed to instructional improvement



7  
employment provided during the summer, like a mini-sabbatical, was said to be a sufficient reward. Also, the opportunity to implement new ideas and approaches and the recognition accorded through the grant was seen as a reward in itself.

• --"I fully support IDP and feel that it should be a significant factor in the reward system at ISU."

--"There should be little or no reward for mere participation in the program, other than for reduced teaching load and some money for special equipment. If the experience results in more effective teaching, it will be rewarded; if not, there should be no reward for the activity itself. It is an opportunity for professional development for those who need or want it, not a demonstration of achievement."

--"Since most faculty have some kind of evidence of merit in some area, the APT process does not (and really can not) make too much distinction between individuals. Then, given the extremely low level of rewards available for merit in the last few years, the effects of any one factor, such as instructional development, on the FORMAL reward system are miniscule indeed."

The relationship between the activities supported by IDP funds and the informal rewards of personal satisfaction, improved teaching, and greater student benefits were cited without qualification as positive outcomes in some of the faculty comments whether or not such efforts were formally rewarded. The Instructional Development Program was described as tangible evidence that the University encouraged and rewarded those faculty who were willing to try out new instructional ideas. The program was seen as creating an environment and providing a vehicle for the improvement of instruction without the risk of punishment for failure.

On the other hand, some of the respondents were not so sanguine about the relationship between innovation and risk. It was noted that new or different instructional approaches have not been received favorably by students and the instructor was penalized in the department by low student ratings merely because the course was unusual. This danger was seen as directly related to the weight given by the department to the student ratings in the APT process. One comment described the punishment for innovation in great detail and noted the substantial financial loss (\$10,000) he expected to incur as a result during the remainder of his teaching career at Illinois State.

--"Instructional development is pursued at the teacher's risk."

--"There is a stigma that if an IDP does not work, one is saddled with a failure. The departments fail to recognize that not all IDP grants will result in positive learning accomplishments. Thus, one is likely not to try if the failure is likely to cost him or her in salary."

in the third department, and an IDP project was said to represent the single most important index of instructional development. If the project were successful, it increased the merit ratings significantly. In the fourth department, the chairperson "beat the faculty over the head" to submit grants for research and instruction. The IDP grants received were double-counted as evidence of merit in teaching and scholarly productivity with the general emphasis on teaching.\*

The general tenor of the other twenty-four chairpersons' comments about the impact of IDP grants on the merit decisions was relatively passive. IDP grants were said to be only one form of evidence of intent to improve instruction and were neither encouraged nor rewarded disproportionately. It was acknowledged by some of the chairpersons that some of the previous IDP projects may have been important to the department, nevertheless, no extraordinary value was accorded the efforts in the APT process. The grants, whether in the summer or the regular year, were said to be sufficient reward.

The chairpersons were asked also to comment on the possible relationship between the IDP project activities and promotion or tenure decisions. The overwhelming consensus of opinion among the chairpersons throughout the University was promotion and tenure are primarily contingent on scholarly productivity, that is, the number of publications. It was noted by many that an above average teaching record was required for promotion or tenure; however, neither were likely to be awarded on the basis of excellent teaching only. Moreover, neither formal nor informal efforts to improve instruction were counted. The most notable exception to this generalization occurred in the one department which considered IDP as an unusually important index of instructional improvement. In this department, one of the junior faculty was recommended for promotion primarily on the evidence of his teaching and his efforts to improve instruction through the IDP program. The recommendation was denied at the college level but was ultimately accepted at the University level after much concern and effort by the nominee, colleagues, and the chairperson.

There was a mixture of opinion about the value of a "publish or perish" type policy at Illinois State. Clearly, some chairpersons felt the policy was unnecessarily restrictive at this institution; however, it was equally clear that some believed it was appropriate and needed.

In general, the chairpersons indicated that the quality of teaching in their departments was above average to exceptional. In some departments, successful completion of certification examinations, employment statistics, employer feedback, and national rankings were cited as evidence. In only two departments did the chairpersons express any concern about the quality of instruction.

\*Despite the groundrule that IDP projects should be considered as evidence of teaching merit, three departments counted IDP as scholarly productivity and one as service only.

## DISCUSSION

In brief, the data obtained in this investigation clearly indicated the effect of faculty efforts to improve instruction on the formal reward structure at Illinois State University is generally nonexistent, minimally positive at best and even punitive in some instances. Whether or not these efforts have been supported by funds from the Instructional Development Program, the result is the same. For some faculty, there was no desire to change the situation; however, the majority of the respondents to the questionnaire indicated they preferred more importance should be attached to instructional improvement activities in salary, promotion, and tenure decisions with the greatest level of dissatisfaction expressed by the IDP recipients, assistant and associate professors and the faculty in the College of Fine Arts. Thus, it appears that despite a major institutional commitment to and wide-scale faculty participation in instructional improvement projects of various kinds, there is virtually no reward for such efforts--a form of "institutional schizophrenia"--contrary to generally accepted principles of initiating and sustaining institutional programs of instructional development.

Gaff (1975), for example, identified twelve propositions about faculty development, which he said were "distilled from the writings of leading spokespersons." Among these propositions was the statement denoting the relationship between the reward structure and faculty change:

"Faculty members will change when: (a) they have knowledge about alternative ways of behaving. . . , (b) they have the belief that change is desirable, (c) they believe they can change in the desired ways, (d) they receive nonthreatening feedback about their own behavior, and (e) they are praised, recognized, and rewarded for effectiveness and improvement. For faculty, this means the reward structure must recognize their development efforts, or they will not long strive for improvement." (emphasis added) (p. 17)

Although this proposition was addressed primarily to faculty development programs, i.e., changes in the faculty as persons, the data from this study suggest the proposition applies equally to instructional development activities, i.e., faculty efforts to improve the content, materials, and processes of instruction.

While the projects funded under the Instructional Development Program admittedly do not represent the totality of efforts to improve instruction at Illinois State, these projects do represent a convenient index of the level of commitment of the faculty to improve instruction over a sustained period of time. Unlike the nonfunded efforts, each approved regular academic year IDP project required, without released or reassigned time, an explicit identification of an instructional problem, and a commitment to complete the stated objectives, expend the allocated funds effectively and efficiently, and provide a report of the accomplishments at the end of the project. (The Summer IDP projects had similar requirements although assigned time was provided.) In other words, the IDP projects represented a "public" obligation of the faculty participants to improve instruction consistent with the institutional commitment.

Perhaps the IDP activities were undertaken more by those persons who were intrinsically motivated to seek out and conquer challenges, whereas the majority of the faculty were content to "tinker." On the other hand, it's of some interest, although not conclusive, to note that consistent with Gaff's proposition, the level of interest in the regular academic year IDP grants declined each year in the absence of an effective reward system within the institution, thus suggesting the motivation to improve instruction may have been more extrinsic than intrinsic. Despite the official rhetoric and generous financial assistance of the University, the lack of tangible rewards and the real or perceived negative effects of failure apparently served to curtail the level of participation in the regular academic year Instructional Development Program. Specifically, the number of faculty who submitted proposals for support during the regular academic year declined from a high of eighty-six in 1972 to forty-four in 1975-76--a reduction of almost 50 percent.\* By contrast, the number of applicants for the summer IDP grants which provided a one-month supplementary salary supplement remained virtually constant since the initiation of the program in 1973-74.

Hause (1974) in his discussion of innovations in public schools used the phrase "economy of scarcity" to account for their introduction and acceptance. He observed:

"People are often shocked that teachers should require tangible incentives to try a new innovation. . . . The personal costs of trying new innovations are often high, however, and seldom is there any indication that innovations are worth the investment. Innovations are acts of faith. They require that they will ultimately bear fruit and be worth the personal investment, often without the hope of immediate return. Costs are also high. The amount of energy and time required to learn the new skills or roles associated with the new innovation is a useful index to the magnitude of resistance. The necessity of relearning acts as a deterrent. New skills make old skills obsolete, and there comes a time when it is no longer worth the effort of learning new skills to master the innovation." (p. 73)

In an "economy of scarcity," that is when salary increments were minimal, or as in the case at Illinois State where there was an increased tendency to grant across-the-board raises, then the costs of innovation quickly exceeded the rewards, thus reducing the inclination of faculty to initiate innovations in their classrooms unless other benefits were made available, e.g., released time, promotion, tenure, better students, better teaching schedule, or career advancement.

\*The number of applicants for the regular year IDP grants in 1976-77 was twenty-one or a reduction of 76 percent since 1972; however, a new mini-grant program was added this year which proved to be extremely attractive and may have reduced substantially the number of applicants to the other program. This new program allowed up to \$200 to improve instruction under an abbreviated application procedure and did not require a final report.

House's discussion of the effect of costs and rewards on innovation used a "speculative mathematical model" developed by Slevin to explain why individuals try new things. "The model says that an individual will try new things if the probability of success of the new thing ( $P_n$ ) minus the probability of success of the current strategy ( $P_s$ ) is greater than the ratio of costs ( $C$ ) to rewards ( $R$ ):  $P_n - P_s > C/R$ ." Applying the data from this study, the tangible rewards contingent on the regular academic year projects were close to zero; therefore, the cost-reward ratio was so great that the probability of success ( $P_n$ ) had to be unrealistically high to encourage participation. By contrast, during the summer grants, the costs were close to zero, negating any concern for the difference between innovation and the status quo, thus sustaining the high level of interest and participation. Inasmuch as the majority of the respondents in this study indicated a much higher importance should be given to instructional development in the decisions about tangible rewards, then it would be predictable from the model and consistent with experience, that instructional efforts under the regular year program would be affected adversely, and the summer program grants would continue to prove attractive.

There is an expectation at ISU, as expressed in some of the responses to the open-ended questions, that instructional improvement is a professional obligation independent of the cost-reward ratio. Good teachers, which most of the faculty were said to be by the chairpersons, are expected to improve their instruction without regard for unusual compensation. Thus, IDP grants are facilitative and do not represent evidence of unusual contributions to teaching. As stated by some, the IDP grants represent an institutional validation in addition to the financial and physical resources needed to implement an idea for the improvement of instruction. Consistent with this interpretation was the high percentage of faculty who identified "personal satisfaction from a job well done" and "increased effectiveness as a teacher" as rewards outside the formal reward structure having high or very high personal importance. For these faculty, it is tempting to speculate that the IDP program is important because it responds to a personal-professional need to teach well regardless of salary, promotion, or tenure.

However, for the majority of the faculty, it appears that if instructional development efforts are to be given greater salience in the reward system at Illinois State, there is a need to reconsider the value of instructional development activities and outcomes. In the present system, the only meaningful formal rewards are promotion and tenure. Inasmuch as promotion and tenure are based largely on the quantity and quality of scholarly productivity, then it follows that instructional development should affect these decisions if it is to have any reward value. To do this under the present system, it must be made possible to include the preparation of slide-tape presentations, videotapes, self-instructional units, course design, curriculum revisions and the like as legitimate forms of scholarly productivity. Publications about instructional development should be encouraged; however, the activities and products should be made acceptable also.



Although this change in designation and function of instructional development activities vis-a-vis the reward system may be appropriate for Illinois State where teaching is central to the mission of the University, the change also creates a significant problem for the APT process. In the past, evidence of teaching effectiveness submitted to the APT committees included some or all of the following: examinations and course syllabuses developed during the year, descriptions of instructional development activities, administrators' and graduates' ratings, personal data, teaching reputation reports, departmental involvement, amount of student contact, and grading procedures. Student ratings of all faculty were required also. Thus, if all forms of instructional development activities and outcomes were excluded as evidence of teaching merit, greater emphasis may be given to student, colleague, and administrators' ratings which--especially the student ratings--are already a source of serious concern for the faculty. To exacerbate this concern by the exclusion of instructional development evidence may be unrealistic.

An obvious solution is the development of a reliable, valid, efficient and acceptable method of measuring teaching effectiveness. If this were to occur, it would obviate the need for ratings and other indirect data. Unfortunately, the history of research on teaching effectiveness suggests this is not likely to occur in the foreseeable future despite the best efforts of many dedicated psychometricians.

The dilemma is clear. On one hand, instructional development activities have no impact on the reward system and, therefore, decline as long as the activities are considered evidence of teaching merit. On the other hand, a redefinition of instructional development activities may give greater weight to ratings which are unacceptable to many of the faculty as evidence of teaching effectiveness.

It is tempting, although somewhat nihilistic, to suggest that a decreased rather than an increased concern for the assessment of teaching effectiveness may be an appropriate solution at Illinois State and similar institutions. This suggestion appears to be consistent with the apparent trend toward across-the-board salary increases, collective bargaining, and the perception that a high percentage of the faculty are excellent teachers already. If the improvement of teaching is a professional obligation which does not result in unusual recognition in the assessment of teaching effectiveness, then perhaps the assessment of teaching per se may not require unusual attention either at the present time, thus resolving the dilemma. Instructional development activities could be rewarded and encouraged as they affect promotion and tenure decisions, which in turn would positively affect the quality of instruction.

Although this study was not designed to test a hypothesis that the viability of instructional development programs are contingent on an effective reward system, the data from this study tend to support such a proposition. Nor was the study intended to be applicable to other institutions; however, it is believed the results could be generalized to other institutions in which similar reward systems exist.

This discussion was not intended to suggest that the concern for the quality of teaching or its improvement has assumed a lesser importance at Illinois State; however, assuming the economic consumer model of man, it is predictable that a large percentage of the faculty, especially at the assistant and associate professor levels will begin to devote more of their energy to publications rather than the improvement of instruction. Although successful teaching is a necessary condition for promotion and tenure--the two viable formal rewards available--it is not sufficient. Thus, it appears that a reassessment of the importance of instructional development efforts is important if the University is to retain its tradition and reputation as a superior instructional institution.

#### REFERENCES

- Deci, Edward L., Intrinsic motivation. New York: Plenum Press, 1975.
- Gaff, Jerry G., Toward faculty renewal. San Francisco: Jossey-Bass, 1975.
- House, Ernest R., The politics of educational innovation. Berkeley: McCutchan, 1974.
- Trow, Martin., Methodological problems in the evaluation of innovation. In M. C. Wittrock (Chm.) Symposium on problems in the evaluation of instruction. Center for the Study of Evaluation, University of California, Los Angeles, CSE Report 31, 1969.

TABLE 1  
Description of Respondents

	Respondents		Population
	Number	Percent	Percent
<u>College</u>			
Applied Science & Technology	62	17	15
Arts and Sciences	178	49	46
Business	28	8	10
Education	63	18	16
Fine Arts	<u>29</u>	<u>8</u>	<u>13</u>
Total	360	100	100
<u>Rank</u>			
Professor	105	29	19
Associate Professor	81	23	20
Assistant Professor	137	38	41
Other (Lecturer, Instructor, Faculty Assistant)	<u>37</u>	<u>10</u>	<u>20</u>
Total	360	100	100
<u>Funded by IDP</u>			
Yes	133	37	
No	<u>227</u>	<u>63</u>	
Total	360	100	

This discussion was not intended to suggest that the concern for the quality of teaching or its improvement has assumed a lesser importance at Illinois State; however, assuming the economic consumer model of man, it is predictable that a large percentage of the faculty, especially at the assistant and associate professor levels will begin to devote more of their energy to publications rather than the improvement of instruction. Although successful teaching is a necessary condition for promotion and tenure--the two viable formal rewards available--it is not sufficient. Thus, it appears that a reassessment of the importance of instructional development efforts is important if the University is to retain its tradition and reputation as a superior instructional institution.

#### REFERENCES

Deci, Edward L., Intrinsic motivation. New York: Plenum Press, 1975.

Gaff, Jerry G., Toward faculty renewal. San Francisco: Jossey-Bass, 1975.

House, Ernest R., The politics of educational innovation. Berkeley: McCutchan, 1974.

Trow, Martin., Methodological problems in the evaluation of innovation. In M. C. Wittrock (Chm.) Symposium on problems in the evaluation of instruction. Center for the Study of Evaluation, University of California, Los Angeles, CSE Report 31, 1969.

TABLE 1  
Description of Respondents

	<u>Respondents</u>		<u>Population</u>
	<u>Number</u>	<u>Percent</u>	<u>Percent</u>
<u>College</u>			
Applied Science & Technology	62	17	15
Arts and Sciences	178	49	46
Business	28	8	10
Education	63	18	16
Fine Arts	<u>29</u>	<u>8</u>	<u>13</u>
Total	360	100	100
<u>Rank</u>			
Professor	105	29	19
Associate Professor	81	23	20
Assistant Professor	137	38	41
Other (Lecturer, Instructor, Faculty Assistant)	<u>37</u>	<u>10</u>	<u>20</u>
Total	360	100	100
<u>Funded by IDP</u>			
Yes	133	37	
No	<u>227</u>	<u>63</u>	
Total	360	100	



TABLE 2

Percentage of Respondents Indicating Importance that IS and SHOULD BE Placed on Instructional Development in Making Salary, Promotion, and Tenure Decisions

Items	No or Low Importance (1 or 2)	Medium Importance (3)	High or Very High Imp. (4 or 5)	Mean	SD
What importance IS placed on instructional development in decisions regarding					
1. Salary Increases	40%	45%	15%	2.70	.83
2. Promotion in Rank	49	38	13	2.51	.89
3. Granting of Tenure	53	34	13	2.45	.90
What importance SHOULD BE placed on instructional development in decisions regarding					
1. Salary Increases	6 %	40 %	54%	3.54	.81
2. Promotion in Rank	11	42	47	3.42	.85
3. Granting of Tenure	16	39	45	3.34	.96

TABLE 3

Regression Results: SALDISC, PROMDISC and TENDISC as a function of RANK, COLLEGE, TENURE and IDP Variables

Regression Results: PRONDISC, PROMDISC, TENDISC											
Dependent Variable	Const.	Raw Regression Weights (F-values given in parentheses)								R	R <sup>2</sup>
		Rank ASSOC	Rank ASST	Col AST	Col BUS	Col ED	Col FA	Tenure	IDP		
<u>Full Model</u>											
SALDISC	.31	.31 (3.92)	.63 (16.63)	.02 (.01)	-.02 (.01)	.21 (1.89)	.40 (3.51)	.10 (.49)	.38 (10.28)	.32	.10
PROMDISC	.28	.54 (11.70)	.74 (23.07)	-.05 (.10)	-.11 (.25)	.11 (.53)	.59 (7.59)	.08 (.30)	.37 (9.91)	.37	.14
TENDISC	.40	.30 (2.95)	.64 (14.24)	.10 (.32)	-.18 (.56)	.13 (.54)	.32 (1.88)	-.05 (.09)	.33 (6.24)	.29	.08
<u>Stepwise Results</u>											
SALDISC	.36	.28 (3.32)	.55 (17.68)				.36 (3.04)		.38 (10.82)	.31	.09
PROMDISC	.28	.51 (11.10)	.68 (27.22)				.59 (8.10)		.38 (11.00)	.37	.14
TENDISC	.43	.29 (2.83)	.60 (17.42)				.30 (1.70)		.33 (6.71)	.28	.08

NOTES: (1) All Multiple R's are statistically significant:  $p < .01$ (2) Tabled F-values for  $df = 1, 200$ :  $F = 2.73$   $p < .10$  $F = 3.39$   $p < .05$  $F = 6.76$   $p < .01$ 

(3) Listwise deletion was used for handling missing data; thus the actual number of cases used in the analysis was 300.

(4) The order of entry of the independent variables for each of the three dependent variables was the same; (1) RANK ASST, (2) IDP, (3) RANK ASSOC, (4) COL FA.

TABLE 2

Percentage of Respondents Indicating Importance that IS and SHOULD BE Placed on Instructional Development in Making Salary, Promotion, and Tenure Decisions

Items	No or Low Importance (1 or 2)	Medium Importance (3)	High or Very High Imp. (4 or 5)	Mean	SD
What importance IS placed on instructional development in decisions regarding					
1. Salary Increases	40%	45%	15%	2.70	.83
2. Promotion in Rank	49	38	13	2.51	.89
3. Granting of Tenure	53	34	13	2.45	.90
What importance SHOULD BE placed on instructional development in decisions regarding					
1. Salary Increases	6%	40%	54%	3.54	.81
2. Promotion in Rank	11	42	47	3.42	.85
3. Granting of Tenure	16	39	45	3.34	.96

TABLE 3

Regression Results: SALDISC, PROMDISC and TENDISC as a function of RANK, COLLEGE, TENURE and IDP Variables

		Raw Regression Weights (F-values given in parentheses)									
Dependent Variable	Const.	Rank ASSOC	Rank ASST	Col AST	Col BUS	Col ED	Col FA	Tenure	IDP	R	R <sup>2</sup>
<u>Full Model</u>											
SALDISC	.31	.31 (3.92)	.63 (16.63)	.02 (.01)	-.02 (.01)	.21 (1.89)	.40 (3.51)	.10 (.49)	.38 (10.28)	.32	.10
PROMDISC	.28	.54 (11.70)	.74 (23.07)	-.05 (.10)	-.11 (.25)	.11 (.53)	.59 (7.59)	.08 (.30)	.37 (9.91)	.37	.14
TENDISC	.40	.30 (2.95)	.64 (14.24)	-.10 (.32)	-.18 (.56)	.13 (.54)	.32 (1.88)	-.05 (.09)	.33 (6.24)	.29	.08
<u>Stepwise Results</u>											
SALDISC	.36	.28 (3.32)	.55 (17.68)				.36 (3.04)		.38 (10.82)	.31	.09
PROMDISC	.28	.51 (11.10)	.68 (27.22)				.59 (8.10)		.38 (11.00)	.37	.14
TENDISC	.43	.29 (2.83)	.60 (17.42)				.30 (1.70)		.33 (6.71)	.28	.08

NOTES: (1) All Multiple R's are statistically significant:  $p < .01$ (2) Tabled F-values for  $df = 1, 200$ :  $F = 2.73$   $p < .10$  $F = 3.89$   $p < .05$  $F = 6.76$   $p < .01$ 

(3) Listwise deletion was used for handling missing data; thus the actual number of cases used in the analysis was 300.

(4) The order of entry of the independent variables for each of the three dependent variables was the same; (1) RANK ASST, (2) IDP, (3) RANK ASSOC, (4) COL FA.

TABLE 4

## Results Pertaining to Rewards Outside the Formal Reward Structure

Reward	Percentage of Faculty Indicating HIGH or VERY HIGH Personal Importance of the Reward	Percentage of Faculty Indicating the Reward Was Actually Realized <sup>1</sup>
Personal satisfaction from a job well done	96%	84%
Increased effectiveness as a teacher	91	84
Given preference regarding your teaching assignment	51	45
Respect of your colleagues	49	65
Opportunity for publication	45	43
Reduced teaching load	39	21
Opportunity for presentation at a national or state conference	37	40
National recognition for your professional work	37	31
Travel funds	33	22
Having a teaching assistant	25	30
Increased opportunity to act as a consultant	23	36
Letter of recognition from the college dean	14	14

<sup>1</sup> The percentages reported for this category are the combined percentages of faculty responding Generally or Definitely Yes to the question of whether or not the reward was received.

Note: Rank order correlation between the two columns of percentages was .84.



TABLE 5

Merit Ratings for Teaching, Scholarship and Service by Academic Year

Academic Year	Percent of Faculty Receiving Ratings of "Considerable" or "Unusual" Merit		
	Teaching	Scholarship	Service
1972-73	79.3%	58.4%	66.5%
1973-74	86.0	62.2	76.2
1974-75	89.4	60.9	81.3
1975-76	90.8	66.8	83.4

TABLE 6

Merit Ratings for Teaching, Scholarship and Service by College and Rank:  
1975-76 Academic Year

College and Rank	Percent of Faculty Receiving Ratings of "Considerable" or "Unusual" Merit		
	Teaching	Scholarship	Service
<u>Arts &amp; Sciences</u>			
Professor (N = 84)	85.7	70.2	86.9
Associate Professor (N = 95)	85.3	72.6	82.1
Asst. Prof. and Instructor (N = 106)	85.8	60.4	77.4
<u>Applied Science and Technology</u>			
Professor (N = 22)	95.4	63.6	95.4
Associate Professor (N = 25)	100.0	84.0	100.0
Asst. Prof. and Instructor (N = 41)	95.1	46.3	78.0
<u>Business</u>			
Professor (N = 6)	100.0	83.3	100.0
Associate Professor (N = 12)	91.7	91.7	91.7
Assistant Professor (N = 17)	94.1	52.9	88.2
<u>Education</u>			
Professor (N = 35)	94.3	62.9	91.4
Associate Professor (N = 24)	87.5	70.8	79.2
Asst. Prof. and Instructor (N = 44)	97.7	59.1	79.5
<u>Fine Arts</u>			
Professor (N = 17)	94.1	94.1	94.1
Associate Professor (N = 27)	100.0	92.6	100.0
Assistant Professor (N = 31)	90.3	67.7	74.2
<u>University By Rank</u>			
Professor (N = 164)	90.2	70.7	90.2
Associate Professor (N = 184)	90.2	77.7	87.5
Asst. Prof. and Instructor (N = 268)	91.4	56.7	76.5
University (Total) (N = 616)	90.8	66.8	83.4